Proteins

Product Data Sheet

MD2-TLR4-IN-1

Cat. No.: HY-128598 CAS No.: 2249801-12-3 Molecular Formula: $C_{22}H_{14}Cl_{2}N_{4}O$ Molecular Weight: 421.28

Target: Toll-like Receptor (TLR) Pathway: Immunology/Inflammation Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

SOLVENT & SOLUBILITY

In Vitro DMSO: 83.33 mg/mL (197.80 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3737 mL	11.8686 mL	23.7372 mL
	5 mM	0.4747 mL	2.3737 mL	4.7474 mL
	10 mM	0.2374 mL	1.1869 mL	2.3737 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.94 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	MD2-TLR4-IN-1 (compound 22m) is an inhibitor of myeloid differentiation protein 2/toll-like receptor 4 (MD2-TLR4) complex, inhibiting lipopolysaccharides (LPS)-induced expression of tumor necrosis factor alpha (TNF- α) and interleukin-6 (IL-6) in macrophages with IC ₅₀ values of 0.89 μ M and 0.53 μ M, respectively ^[1] .
IC ₅₀ & Target	$MD2 ext{-}TLR4^{[1]}.$

REFERENCES

[1]. Liu Z, et al. Discovery of 3-(Indol-5-yl)-indazole Derivatives as Novel Myeloid Differentiation Protein 2/Toll-like Receptor 4 Antagonists for Treatment of Acute Lung Injury. J Med Chem. 2019 Jun 13;62(11):5453-5469.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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